

IN THE CLAIMS:

All claims currently pending are presented herein for the Examiner's convenience.

1. (Previously Presented) A recording method comprising a step of providing an ink from a recording head to a recording medium through a gap provided between the recording head and the recording medium, the ink being supplied to the recording head from an ink tank comprising an ink contact member and the ink contacting the ink contact member,

wherein the ink comprises:

(i) a fluorescent coloring material;

(ii) a nonionic surfactant;

(iii) a compound which is not compatible with (ii); and

(iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an ink-holding member made of polypropylene.

Claims 2 and 3 (Cancelled).

4. (Previously Presented) The method according to Claim 1, wherein the ink-holding member is located in an ink container.

5. (Previously Presented) The method according to Claim 1, wherein the step comprises the sub-steps of:

ejecting ink droplets from an orifice in response to recording signals using an ink-jet method, and

conducting recording on the recording medium.

6. (Original) The method according to Claim 5, wherein the sub-step for ejecting ink droplets is performed by applying thermal energy to the ink.

7. (Original) The method according to Claim 1, wherein the fluorescent coloring material is water-soluble or hydrophilic.

8. (Original) The method according to Claim 1, wherein the concentration of the fluorescent coloring material in the ink is equal to or exceeds the concentration thereof exhibiting the maximum fluorescence intensity.

9. (Previously Presented) The method according to Claim 1, wherein the concentration of the fluorescent coloring material in the ink is not more than 1.5% by weight based on total weight of the ink.

10. (Original) The method according to Claim 1, wherein the fluorescent coloring material is a fluorescent dye.

11. (Original) The method according to Claim 1, wherein the nonionic surfactant is a liquid at room temperature.

12. (Original) The method according to Claim 1, wherein the nonionic surfactant has an HLB of not more than 13.

13. (Original) The method according to Claim 1, wherein the concentration of the nonionic surfactant in the ink is a value causing no phase separation in the ink.

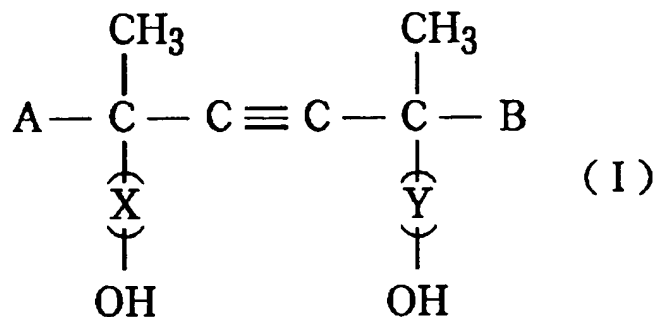
14. (Previously Presented) The method according to Claim 1, wherein the concentration of the nonionic surfactant in the ink is a value that does not cause phase separation of the nonionic surfactant even when the ink does not contain the fluorescent coloring material.

15. (Previously Presented) The method according to Claim 1, wherein the concentration of the nonionic surfactant is contained in an amount not more than 1.0% by weight based on total weight of the ink.

16. (Original) The method according to Claim 1, wherein the nonionic surfactant is water-soluble or hydrophilic.

17. (Original) The method according to Claim 1, wherein the nonionic surfactant has an acetylene group.

18. (Previously Presented) The method according to Claim 1, wherein the nonionic surfactant has a structure represented by the following formula I:



(wherein A and B are independently C_nH_{2n+1} (n being an integer of 1 to 10), and X and Y are independently a ring-opened ethylene oxide unit and/or a ring-opened propylene oxide unit.)

Claim 19 (Cancelled).

20. (Original) The method according to Claim 1 or 4, wherein (iii) is liquid at room temperature.

21. (Original) The method according to Claim 1, wherein (iii) is water-soluble or hydrophilic.

22. (Original) The method according to Claim 1, wherein (iii) is a compound selected from the group consisting of sugar alcohol, sugar alcohol complex and an ethyleneoxide and/or propyleneoxide adduct thereof.

Claims 23 and 24 (Cancelled).

25. (Previously Presented) The method according to Claim 1 or 4, wherein the ink-holding member is formed of a fibrous aggregate.

26. (Original) The method according to Claim 25, wherein the fibrous aggregate is arranged along a direction of discharging the ink.

27. (Original) The method according to Claim 4, wherein the ink-holding member has a surface in contact with the ink container.

28. (Original) The method according to Claim 1, wherein the ink further comprises a primary alcohol.

29. (Original) The method according to Claim 1, wherein the ink further comprises a non-fluorescent coloring material.

30. (Original) The method according to Claim 29, wherein the non-fluorescent coloring material is water-soluble or hydrophilic.

31. (Original) The method according to Claim 29, wherein the non-fluorescent coloring material is an azo dye.

32. (Previously Presented) The method according to Claim 29, wherein a concentration of the non-fluorescent coloring material in the ink is not less than the concentration of the fluorescent coloring material.

33. (Original) The method according to Claim 1, wherein the ink contains ammonium ions and alkali metal ions.

34. (Original) The method according to Claim 1, wherein the ink further comprises at least one selected from urea and derivatives thereof.

35. (Original) The method according to Claim 34, wherein the derivatives include alkyl derivatives of urea and ethyleneoxide adducts of urea and propyleneoxide adducts of urea.

36. (Original) The method according to Claim 1, wherein the surface tension of the ink is not more than 40 mN/m (dyne/cm).

37. (Original) The method according to Claim 1, wherein pH of the ink is not more than 8.

38. (Previously Presented) An ink-cartridge comprising an aqueous ink and an ink contact member,

wherein the ink comprises:

(i) a fluorescent coloring material;

(ii) a nonionic surfactant;

(iii) a compound which is not compatible with (ii); and

(iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an ink-holding member made of polypropylene.

39. (Original) The ink-cartridge according to Claim 38, wherein the ink contact member is at least one selected from an ink container containing the ink therein and an ink-holding member provided in the ink container together with the ink.

40. (Original) The ink-cartridge according to Claim 39, wherein the ink-holding member is porous.

41. (Original) The ink-cartridge according to Claim 39, wherein the ink-holding member has a surface in contact with the ink container.

42. (Original) The ink-cartridge according to Claim 39, wherein the ink-holding member has a multi-layered structure.

43. (Previously Presented) The ink-cartridge according to Claim 42, wherein layers constituting the multi-layered structure are arranged along a discharge direction of the ink in the ink container.

44. (Original) The ink-cartridge according to Claim 42, wherein the ink-holding member has a surface in contact with the ink container.

45. (Original) The ink-cartridge according to Claim 39, wherein the ink-holding member is made of a fibrous aggregate.

46. (Original) The ink-cartridge according to Claim 45, wherein the fibrous aggregate is arranged along a discharge direction of the ink in the ink container.

47. (Original) The ink-cartridge according to Claim 46, wherein the ink-holding member has a surface in contact with the ink container.

48. (Previously Presented) A printing apparatus comprising an ink-cartridge defined by Claim 38 and an ink-jet head for discharging ink placed in the ink-cartridge.

49. (Original) An information recording apparatus comprising an ink-cartridge of Claim 38 and an ink-jet head for discharging ink placed in the ink-cartridge.

50. (Previously Presented) An ink tank comprising an aqueous ink, an ink container and an ink-holding member,

wherein the ink comprises:

- (i) a fluorescent coloring material;
- (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii); and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink-holding member comprises polypropylene.

51. (Previously Presented) The recording method according to Claim 1, wherein the fluorescent coloring material is C.I. Acid Red 52, and the content of the coloring material is at most 0.4% by weight based on total weight of the ink.

52. (Previously Presented) The ink-cartridge according to Claim 38, wherein the fluorescent coloring material is C.I. Acid Red 52, and the content of the coloring material is at most 0.4% by weight based on total weight of the ink.

53. (Previously Presented) The ink-tank according to Claim 50, wherein the fluorescent coloring material is C.I. Acid Red 52, and the content of the coloring material is at most 0.4% by weight based on total weight of the ink.